

## ABSTRACT

A method and apparatus for unifying medium access control (MAC) protocols that can unify the various existed MAC protocols, e.g. slotted ALOHA protocol, carrier sense multiple access (CSMA) protocol, group randomly addressed polling (GRAP) protocol and so forth. The  
5 method comprises: grouping the MAC nodes having a ready packet according to preset parameters; and transmitting packets according to the grouping result and the preset parameters. The apparatus comprises a unified MAC processor, a memory and a transmitter/receiver circuit. Therein, the memory further comprises a unified MAC program and a packet buffer and the unified MAC program is used to control the unified MAC processor. After configuring the  
10 unified MAC program, the unified MAC processor will operate as the specific MAC protocol. Therefore, the apparatus can transmit its packet via the transmitter/receiver circuit thereon in accordance with the specific MAC protocol.